

3.6 Public Facilities and Services

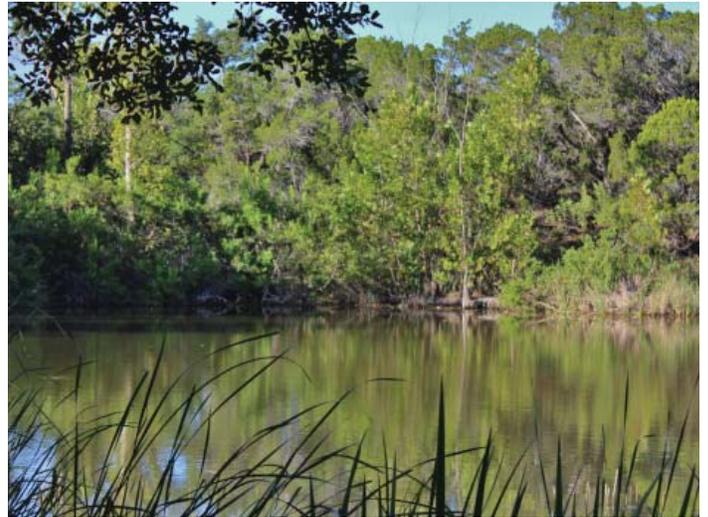
OVERVIEW

The City of Bee Cave provides police services, development and building permitting, library services, and general administration, while other services are handled by various regional entities, as well as HOA's and non-profits. The Comprehensive Plan addresses functions and services outside of the City's direct control (e.g., water, sewer, energy utilities) to provide guidance for coordinating with these service providers in the future.

WATER AND WASTEWATER UTILITIES

Understanding the system's existing water infrastructure systems and capacities is essential to planning for future development. Bee Cave's water supply originates in Lake Austin and the majority of it is managed by the West Travis County Public Utility Agency (WTCPUA). WTCPUA water service area includes an estimated population of 30,000 people in western Travis County and northern Hays County. The WTCPUA has no authority to levy a property tax and operates by charging customer service fees. To reach Bee Cave, the raw water travels from Lake Austin to the Uplands Water Treatment Plant (located off of Bee Caves Road) via a raw water transmission line. This water treatment plant provides the majority of potable water within the City of Bee Cave and portions of the ETJ. Once the water has been treated by the WTCPUA, it enters a distribution system that provides water to businesses and residents of Bee Cave comprised of the following (see Figure 3-6):

- Over 30 miles of water transmission lines (12" to 30" in the SH 71 system)
- 1 Water Treatment Plant
- Uplands W.T.P – 20 MGD with a proposed upgrade to 27 MGD
- 5 existing and proposed pump stations (in the SH 71 system)
- 3 elevated storage tanks
- Multiple ground storage tanks



Water Resources

Understanding existing water infrastructure system and capacities is essential to planning for future development.

A small portion of Bee Cave and the ETJ is within the Travis County Water Control and Improvement District (WCID) 17. In Texas, WCIDs are empowered by the State to purchase, operate, and maintain everything necessary to provide water, wastewater, and drainage services. WCIDs operate by collecting property taxes and charging service fees. WCID 17 includes neighborhoods north of SH 71 including the Falconhead West, Madrone, and Cielo neighborhoods, as well as nearby areas in the Lakeway ETJ.

The WTCPUA also provides wastewater services to Bee Cave and its surrounding ETJ. Wastewater is collected and treated at either the Lake Pointe Wastewater Treatment Plant (WWTP) or the Bohl's WWTP, with capacities of 675,000 gallons per day and 325,000 gallons per day, respectively. The WTCPUA is currently in the process of expanding the wastewater treatment capacity by 575,000 gpd at the "Bohl's WWTP" located on the north side of Bee Cave Parkway opposite of the Hill Country Galleria to meet future demand.

The wastewater system collects flow through a series of gravity pipelines. Due to the geography in this region, WTCPUA must rely on a collection of lift stations and force mains to transfer this flow to one of the two treatment facilities. This wastewater system currently utilizes 22 lift stations and has plans to add one more in the near future. Figure 3-7 illustrates existing and proposed wastewater infrastructure in Bee Cave. The WTCPUA maximum sewer treatment and treated effluent disposal for the service area is not to exceed 1.8 MGD.

Based on WTCPUA's stated water and sewer service policies, the utility will continue to honor existing wholesale and retail water and sewer service agreements and will only provide new retail service within the service areas (which includes Bee Cave's ETJ). The provision of service assumes that future land uses will be consistent with WTCPUA's future population assumptions (the same as those used for this Comprehensive Plan update) and development that is consistent with existing impervious coverage limits. Developers are required to fund the construction of water, sewer, and drainage infrastructure systems needed to serve new development projects. The WTCPUA has a policy to not provide sewer service outside of its defined service area (including Bee Cave and its ETJ) and will work with the City and the WTCMUD 5 on the development of an inter-local agreement for the provision of retail sewer service within Bee Cave's City and ETJ boundaries. There are several older neighborhoods within the City that are currently utilizing septic service (e.g., Homestead, Bee Cave West, and the majority of Uplands) with no current plans for transitioning to WTCPUA wastewater service.

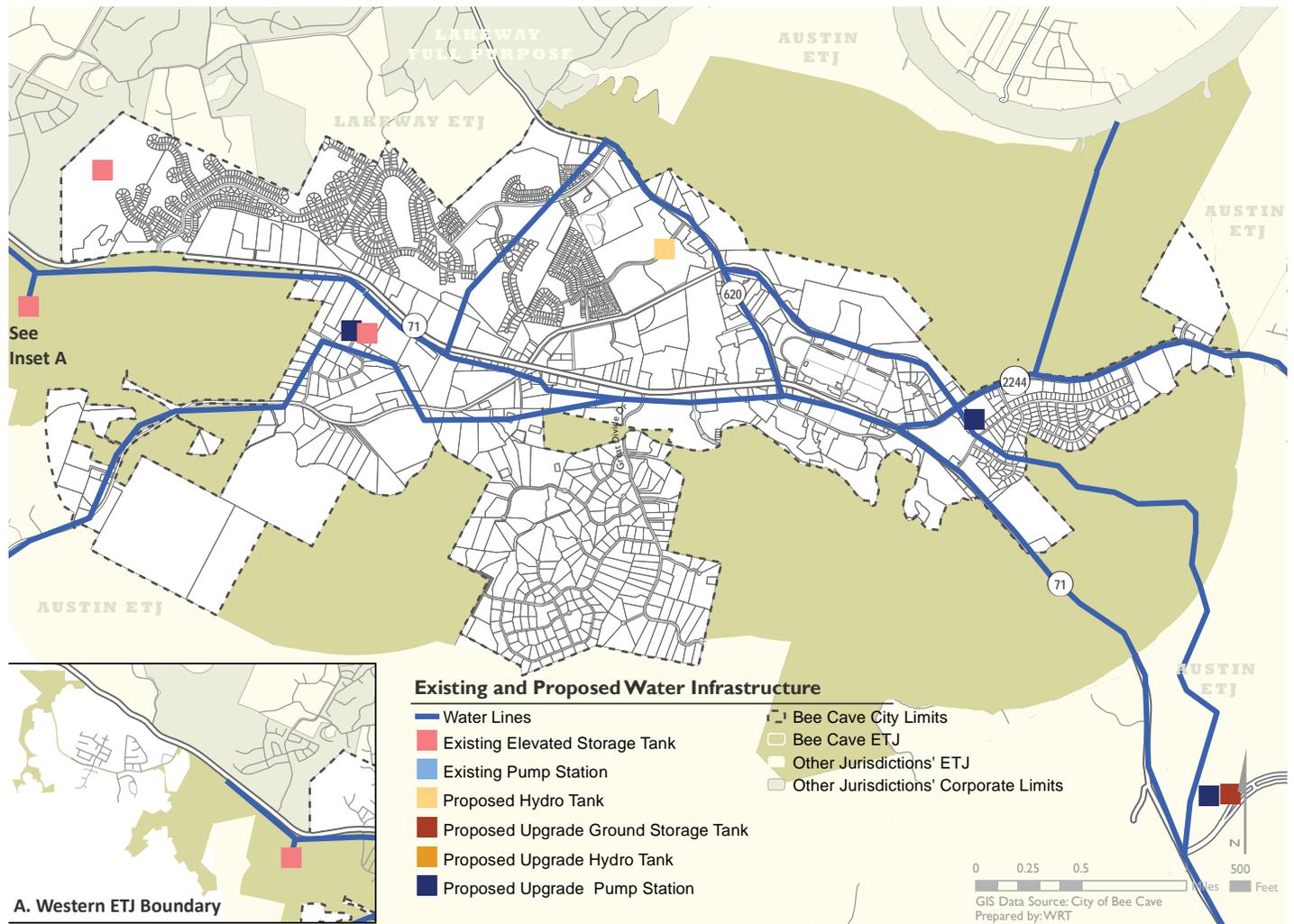
ENERGY

Electric Service

Electric service in Bee Cave is predominantly provided by Austin Energy, a publically owned electric utility providing service to more than 488,000 customers within the Austin area, including Bee Cave and other areas of Travis County, and a small portion of Williamson County. Austin Energy's mission is to "deliver clean, affordable, reliable energy and excellent customer service" with an emphasis on energy efficiency and protection of the environment. Each year the utility reviews its targets and progress in improving energy efficiency and shifting from non-renewable to renewable energy. The 2016 goal is to generate 55% of energy from renewables (including wind, solar, and biomass) by 2025, an increase from about 28% in 2015. Austin Energy offers a number of energy efficiency rebates and loans, and participates in events organized by its service area communities, neighborhood associations, and professional organizations. The southwestern area of the City is served by Pedernales Electric Cooperative (PEC). PEC is a distribution and transmission cooperative delivering electricity to more than 270,000 users across 8,100 square miles; the Lower Colorado River Authority (LCRA) is PEC's primary wholesale energy provider.

Both Austin Energy and PEC offer various incentives for customers to conserve energy. Austin Energy offers financial incentives to customers interested in installing solar photovoltaics (PV) systems on their homes. The cost of residential installations have fallen in recent years, and depending on site conditions PV rooftop systems can be designed to reduce utility bills, increase property values, and help to reduce carbon emissions. The City's building and electrical permit requirements do not reference any restrictions or incentives for solar or other renewable energy systems. At least one HOA requires approval of any solar system before it is installed, however, under Texas law HB 362, HOAs must allow solar energy installations except in very specific circumstances. There are a growing number of residents and businesses with solar PV installations in Bee Cave.

Figure 3-6: Water Infrastructure and Service



Natural Gas and Propane

According to the 2013 Census, the predominant types of home heating fuel reported in Bee Cave are electric (52%), natural gas (30%), and LPG/propane gas (14%). As recent as 2012, all households using gas for heating or cooking used propane rather than natural gas, typically resulting in higher costs for residents. Neighborhoods such as Falconhead and Falconhead West have long term commitments for regional propane service and rates that are not competitive with natural gas. However, the reliance on propane is shifting as Bee Cave and Texas Gas Services (TGS) entered into a 15-year franchise contract in 2012, allowing the utility right of way access to build natural gas infrastructure. Within the last several years, Texas Gas has installed gas

delivery lines on Hamilton Pool Road and on Bee Cave Parkway. As the area's natural gas systems expand, rate increases are permitted by the state to help fund investment in the utility systems, including extending new pipes. Similar to Austin Energy, TGS offers conservation strategies and incentives to its customers and is working with regional utilities to promote "whole-home" conservation strategies that more efficiently use natural gas, electricity and water.

SOLID WASTE AND RECYCLING

The City does not provide solid waste or recycling services to residents. Instead property owners can select from several different providers depending on their location. Most of the HOAs have contracted

service to residents, while others may choose a provider. Frequency of trash collection and recycling pick up varies by neighborhood. Refuse and recycling at City facilities are contracted through the City of Bee Cave.

COMMUNICATIONS INFRASTRUCTURE

Bee Cave residents have several options among available telecommunication services, including broadband internet access from major providers with advertised download services at 10 Mbps up to 1 gigabit (1,000 Mbps). According to the National Broadband Map, all areas of Bee Cave have access to broadband internet service, with speeds starting at 3 Mbps (see Figure 3-8) however there are areas (particularly in rural neighborhoods like the Homestead) reportedly without access to service. Fiber is in the process of expanding to the Austin region starting with select areas of South and Southeast Austin. With the expansion of fiber, the region can expect faster internet speeds and connectivity, of up to 1 gigabit (1,000 Mbps) in some areas. The expansion in the Austin region is increasing competition and many other regional providers are advertising faster and more competitive services.

PUBLIC SAFETY AND HEALTH

Police, Fire, and Emergency Services

The City of Bee Cave is served by the Bee Cave Police Department, which includes 19 full-time officers as of 2016. Bee Cave enjoys a low crime rate, with the majority of crime in the area is limited to property theft in retail areas. Traffic, road congestion, and vehicular accidents tend to be the greatest public safety concern in Bee Cave. The Lakeway Police Department provides dispatch services for Bee Cave and operates an emergency 911 Public Safety Answering Point, the equipment for which is funded by Capital Area Council of Governments.

Because Bee Cave is not a full-service municipality, fire and EMS services are provided by Lake Travis Fire and Rescue. Travis County Emergency Services District Six / Lake Travis Fire Rescue covers 110 square miles

with five fully staffed and operating fire stations. Fire Station 603 is located within Bee Cave, and serves Bee Cave, Lake Pointe, Uplands, Deer Creek, and Hamilton Pool developments. Mutual aid is provided by the Travis County Sheriff's Office and neighboring cities when needed. Emergency Medical Service is provided by Austin/Travis County.

Emergency management services affecting Bee Cave are conducted at the county or regional level, though fire and police personnel are trained in emergency service provision. In Travis County, The Office of Emergency Management, a division of Travis County Emergency Services, serves as the coordinating point of disaster preparedness, mitigation, response, and recovery capabilities for Travis County in cooperation with the county's various municipal governments. The City of Bee Cave website also contains links to keep the community informed about safety.

Community Health

Bee Cave has several emergency / urgent care centers providing out-patient care located in the City. The closest in-patient hospital is located 3 miles from Bee Cave in Lakeway. The facility opened in 2012 and provides full-service medical care including emergency, an onsite heart institute, and labor and delivery care. Bee Cave has a number of doctors and health care practitioners within the City, including family care, pediatrics, dentistry, and other specialties. Additionally, there are options for specialized assisted living care in Bee Cave. Travis County Health and Human Services Department has a mission to serve all residents of the Travis County by improving quality of life for all, protecting vulnerable populations, investing in social and economic well-being, and promoting healthy living including physical, behavioral, and environmental health. There are no county facilities in Bee Cave; the closest community center is located in Oak Hill on SH 71.

PUBLIC FACILITIES GOALS & STRATEGIES

Goal PFS-1:

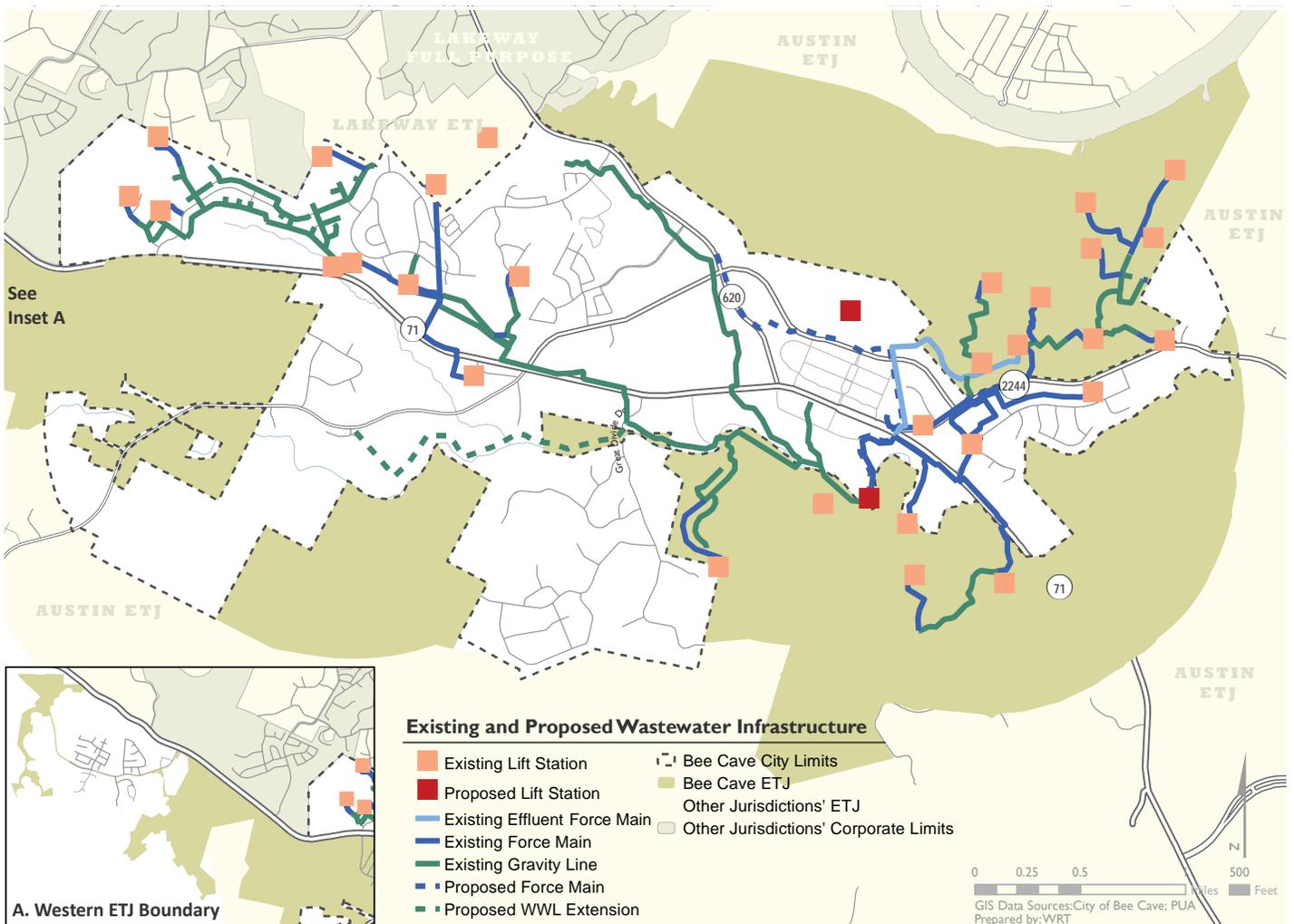
Ensure that Bee Cave’s utilities and infrastructure adequately serve the needs of residents and businesses, and are adaptable to future growth.

The provision and capacity of water and sewer services is one of the strongest predictors for how quickly an area will be able to grow and how it will develop. In recent years, the extension of water and sewer lines and service have made it possible for the City’s population to increase at a rapid pace corresponding to development of higher intensity residential and commercial uses. Currently the WTCPUA has defined service area boundaries and policies in place to limit

growth outside of Bee Cave’s City and ETJ, as well as the other municipalities within its service area. The City should continue to coordinate with the WTCPUA and other regional providers to ensure that Bee Cave’s vision for the City and its future land use map is realized and appropriately phased consistent with water and wastewater service capacities.

- 6.1 Ensure that public utility and infrastructure systems (e.g., water supply, storm drainage, etc.) will adequately serve the health, safety and general welfare of residents and businesses within the City. Use the Future Land Use Plan, and the Comprehensive Plan to aid in determining locations where utilities and infrastructure may be needed.

Figure 3-7: Wastewater Infrastructure and Service



- 6.2 Assist and coordinate with utility providers on plans for water, wastewater, and other utilities to addresses current and future community service needs. Although Bee Cave relies on third parties for utility services, the City can get involved in coordination and advocating for the high-quality, reliable service. Bee Cave also has a role in ensuring that utility plans and improvements are consistent with the FLUM and the community’s vision as expressed in the Comprehensive Plan.
- 6.3 Continue to work with WTCPUA to develop memorandums of understanding/inter-local agreements for coordinating the site development review and approval processes.
- 6.4 Investigate and identify methods of securing funding for overall water and wastewater system improvements in partnership with WTCPUA.
- 6.5 Encourage a combination of best practices in green infrastructure and Low Impact Development (LID) in addressing stormwater management / runoff on-site and require on-going maintenance. Bee Cave has very high standards for addressing and mitigating stormwater pollutants (95% on site) which has limited the use of a variety of mitigation measures. The City can encourage the combination of several different BMPs to meet the 95% standard. Possible improvements include reduction and temporary detention of stormwater runoff (e.g., bio-retention ponds, filtration basins), as well as on-site BMPs such as rain gardens, green roofs, stormwater bump-out / vegetated swales, or rain barrels. Development of a Stormwater Management Best Practice Manual would help to set clear standards for expectations from the City and property owners.
- 6.6 Encourage residential and non-residential water conservation through guidelines and water use restrictions as needed to help reduce per capita water use.
- 6.7 Work with regional and federal state entities to reduce risk of flooding and property damage through coordinated study and updates to the FEMA Flood Insurance Maps. Current FEMA maps are over 30 years old and updates are done on a site by site ad hoc basis. Bee Cave should participate in regional updates (e.g., City of Austin update) and consider a citywide analysis that would provide a full view of potential hazards.
- 6.8 Encourage interdepartmental coordination within the City to plan roadway improvements based on the necessity of replacement for all utilities within the right-of-way.

Goal PFS-2:

Provide safe, reliable, and cost-effective electric and communications utilities that promote responsible use of environment resources and meet future needs as technology continues to improve.

Bee Cave is well served by electric service, however many areas of the City still rely on propane gas for heating – which is sometimes higher in cost than natural gas. The City is fairly well-served by internet and communication technology, and service speeds and costs are improving. Infrastructure and direct fiber service to Bee Cave is expanding, and the City should express its interest and work with partners to expand capacity and available speeds to remain economically competitive and attractive to residents and businesses.

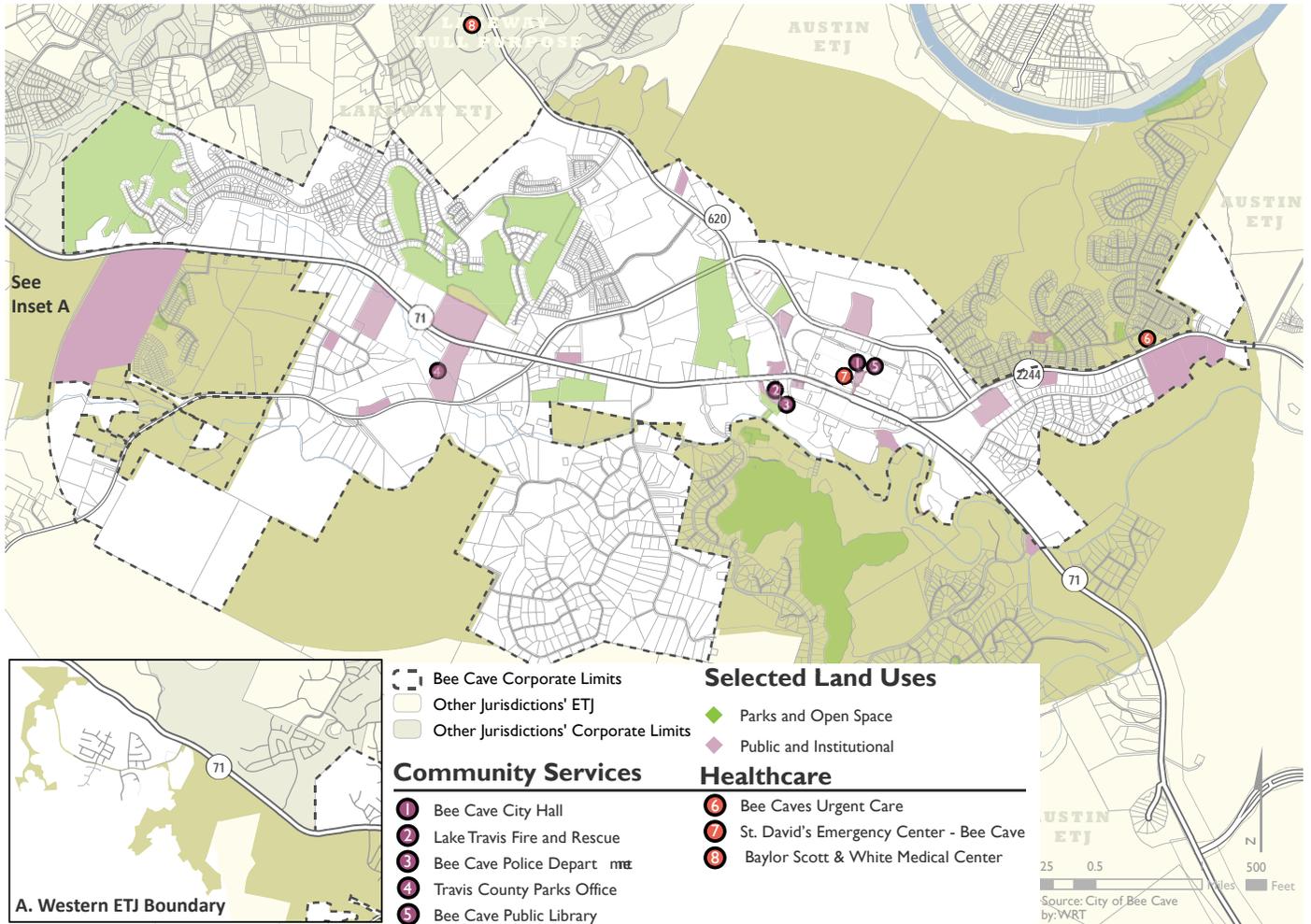
- 6.9 Continue to require the installation of underground electric distribution along all City of Bee Cave roads, as well as encourage on all roadways, particularly as roadway improvements are made.
- 6.10 Target internet communications providers and other technology-based organizations to expand fiber service in Bee Cave that is suitable for residents, home-based workers, and businesses. Work with the Economic Development Board, Chambers, and other partners to facilitate expanded access through fiber service and other technologies as they become available.

Figure 3-8: Broadband Internet Access



- 6.11 Work with utilities to develop acceptable standards for electric utility line placement when underground utilities are not feasible.
- 6.12 Support Austin Energy’s efforts to continue to increase its renewable energy portfolio and improve efficiency.
- 6.13 Incorporate energy conservation measures and renewable energy generation into the design and use of public facilities, including City Hall, libraries, schools, and recreational facilities. The City should develop targets for future public building construction and retrofit, and work with LTISD to include conservation measures in all new school facilities.
- 6.14 Encourage residents and business owners to take advantage of potential energy efficiency rebates, and other incentives offered through regional utilities.
- 6.15 Ensure that existing regulations do not hinder the use of renewable energy generation equipment on site and encourage public buildings, businesses, and residents to consider appropriate energy generation, including solar or wind systems. There are no local requirements or incentives to encourage renewable energy generation currently within the City’s zoning ordinance. Many cities encourage the use of renewable energy and energy efficient building design, through

Figure 3-9: Community Services



requirements for solar access and guidelines /setbacks for the use of energy generation equipment.

Goal PFS-3:

Ensure that Bee Cave remains a safe, family-friendly, hospitable community with on-going public facility and service needs met through sound long-range and fiscal planning.

6.16 Continue to maintain an exceptional level of police, EMS, and fire protection for residents and businesses.

6.17 Consider the options, as well as potential costs and benefits, of providing fire and emergency protection service to the Lake Travis Fire & Rescue or other service.

6.18 Consider a multi-use community center within Bee Cave to service the growing population and to act as a civic activity and meeting place.

6.19 Encourage active, healthy living through coordinated improvements to the City's walking, running, and biking infrastructure for all ages and abilities.